Plasma Waves in the Jovian Magnetosheath: Ulysses observations

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During the Ulysses flyby of Jupiter in February, 1992, the spacecraft traversed the Jovian magnetosheath for a few hours during the inbound pass and for a few days during the outbound pass. The plasma wave data from the Unified Radio and Plasma Wave instrument during the magnetosheath crossings are examined. The Fast Envelope Sampler which records transient signals in a broadband frequency range observed electromagnetic waves at a few tens Hz which is a fraction of the local electron gyrofrequency. They may be the whistler mode type of electron waves. During the periods when strong mirror waves are seen in the magnetic field data, the expected lion roars as in the case' of the Earth's magnetosheath have not been observed. Near the magnetosheath/magnetosphere and near the bow shock discontinuity, waves at about 101 Hz to a few kHz are observed. '1'heir properties will be discussed.

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10. None.

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